

REMARKS

Applicants appreciate the thoroughness with which the Examiner has examined the above-identified application. Reconsideration is requested in view of the amendments above and the remarks below.

Specification objections

The specification has been amended at page 9 in the manner requested by the Examiner.

Rejection under 35 USC § 112, first paragraph

The Examiner has rejected the claims for reciting that the shroud is both "heat resistant" and "heat transmitting" at the same time. In fact, these properties are discussed at some length in the application at page 3, line 9 to page 4, line 2, and examples of suitable materials are given, as well as the detailed example at pages 9 and 10 showing exactly how one skilled in the art may make and use the invention. By "heat resistant," the applicants have disclosed in the specification at page 3, lines 9 to 11 that the shroud material "does not melt, burn, distort or decompose when the hot gases or flame is played on it." Since the ability of the shroud to resist melting, distortion or degradation when the hot gas is applied to it is consistent with the shroud's heat transmitting properties, applicants have amended the claim language to specify these heat resistant properties. Accordingly, the rejection under § 112, first paragraph is believed obviated.

Otherwise allowable subject matter

Except for the rejection under § 112, first paragraph, which is now overcome, claims 4 and 8-16 have not been otherwise rejected and the subject matter thereof is believed to be allowable. Dependent claim 4 has therefore been cancelled, and has been rewritten as new independent claim 17, which combines the subject matter of claims 1, 3

and 4. Similarly, dependent claim 8 has been cancelled and rewritten as new independent claim 18 (combining the subject matter of claims 1, 6, 7 and 8), and claims 9 and 13 have been amended to be dependent on new claim 18. Since claim 14 is already in independent form, claims 9-18 are believed to be in condition for allowance.

Rejection under 35 USC § 102

Claims 1-3 and 5-7 stand rejected under 35 USC § 102 as being anticipated by Overbergh et al. U.S. Patent No. 5,482,087. Applicant respectfully traverses this rejection.

Applicant has cancelled claim 1 and replaced it with new claim 19. Dependent claims 2, 3, 5 and 6 have been amended to be dependent on new claim 19.

The invention as claimed in new claim 19 relates to a method for heating a first zone of an elongate tubular article comprising a substrate and a heat degradable coating on said first zone. In a preferred form, the substrate is a tubular steel pipe, and the coating is a factory-applied or mainline coating of a polymeric composition such as a polypropylene based composition that, in the course of forming a weld joint in the field, requires to be heated to a high temperature in order to activate an adhesive coating on a protective covering such as a heat shrink sleeve that is to be applied to the coating. The problem with which the invention deals is that, when the coating is heated to the activation temperature by applying a hot gas such as a torch flame on the polypropylene coating, the coating tends to degrade and becomes waxy and this interferes with the adhesion of the above-mentioned adhesive coating. It has been surprisingly found that, by applying a heat transmitting and heat dispersive shroud material, such as a woven glass fibre blanket or like pervious blanket material, a metallic mesh material, or a metal sheet or like conductive sheet material, the polypropylene or other heat degradable coating can

be heated to an appropriate activation temperature at which it will be receptive of an adhesive coating without the problem of the coating becoming waxy or otherwise degrading. As required by claim 17, shroud material does not extend over an adjacent second zone of the tubular article that is bare of the coating. This has the advantage that the second zone may be heated directly to the activation temperature by applying a hot gas or other heat source on it, since ordinarily it is desired to apply the adhesive-coated heat shrink sleeve or other protective coating on the coating-bare second zone also.

With respect to the cited reference Overbergh et al. U.S. Patent No, 5,482,087, the Examiner equates the heat shrink sleeve 8 with applicant's heat transmitting shroud material. One of ordinary skill in the art would not consider such heat shrink sleeve to be a heat transmitting material, as required by applicant's claim 17. On the contrary, the heat shrink sleeve is formed of layers of polymers (as described in Overbergh at column 1, lines 26 to 35). Further, Overbergh's heat recoverable sleeve is coated on its inside with a layer of polymeric heat activatable adhesive. These polymeric materials are regarded as heat insulators and not as heat-transmitting materials. It may be noted that in Overbergh the pipeline 2 and coating 6 are not heated by any heat transmission from a hot gas source through the sheet 8 and adhesive 10. In Overbergh, the pipeline 2 and the portion of the coating 6 underlying the sleeve 8 are heated directly to an activation temperature typically by applying a gas torch on them for several minutes. Please see in this respect Overbergh column 2, lines 48 to 53 and column 6, lines 23 to 25 and 31 to 32.

While, as noted in Overbergh the gas torch heat penetrates through the sheet 8 to activate the adhesive 10, this does not mean that the material of the sheet 8 may be classified as heat transmitting. As will be appreciated, even heat insulators permit some

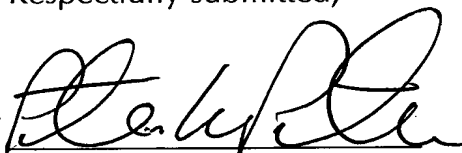
transmission of heat through them when exposed for a sufficiently long period to a sufficiency high flux of heating energy.

Further, contrary to the requirements of applicant's claim 17, the heat-recoverable sheet 8 shrinks, and therefore distorts when a hot gas source is applied to it (Overbergh column 6, lines 31 and 32).

Further, the heat recoverable sheet 8 in Overbergh et al. extends over the weld region of the pipeline 4 which is bare of the coating (Overbergh et al. column 6, lines 22 and 23), and therefore Overbergh et al do not disclose or suggest and in fact teaches away from the requirement of applicant's claim of the shroud material not extending over the second zone that comprises the substrate bare of the coating.

It is respectfully submitted that the application has now been brought into a condition where allowance of the entire case is proper. Reconsideration and issuance of a notice of allowance are respectfully solicited.

Respectfully submitted,



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